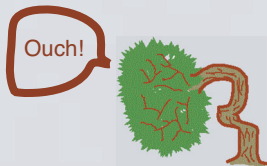


Lignin - Functional and Compositional Definition

Function

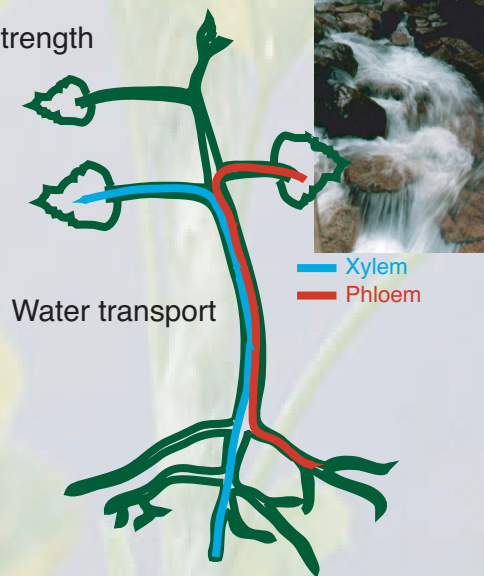
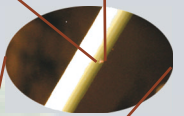
Lignin is found in all terrestrial plants. It is located in the cell walls of conducting and supporting tissues assisting in the plant's...



Mechanical strength



Defense against pathogen infection



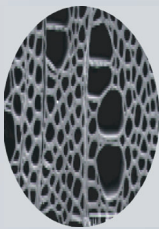
Water transport

— Xylem
— Phloem



Composition

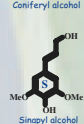
Cell Wall



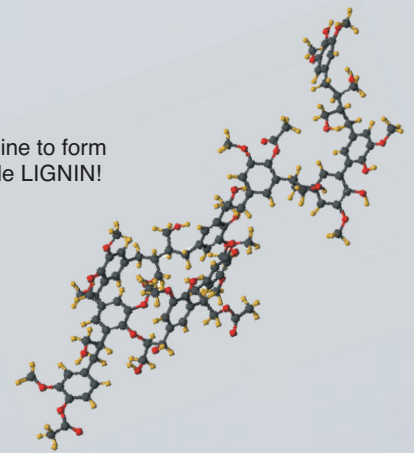
PEROXIDASE
HYDROGEN PEROXIDE



Lignin "monolignols"
(precursors)



Monolignols combine to form
the macromolecule LIGNIN!



Lignin is a polymer formed in specific plant cell walls from "monolignols" (precursors) by chemical reactions. These reactions are driven by the presence of peroxidase and hydrogen peroxide.